June 21, 1932. H. MONROE 1,864,086

STOVEPIPE FASTENER

Filed Feb. 17, 1930

Fig. 1.

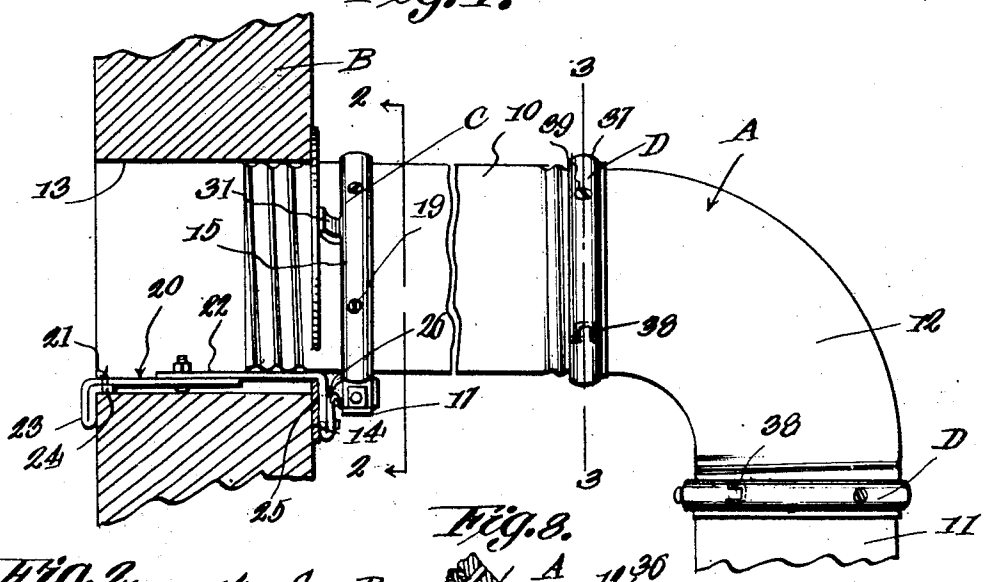


Fig. 2.

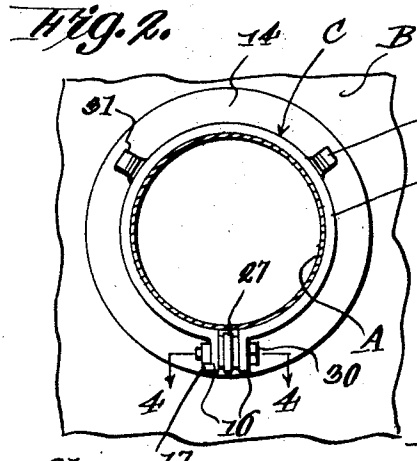


Fig. 8.

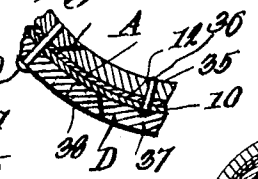


Fig. 3.

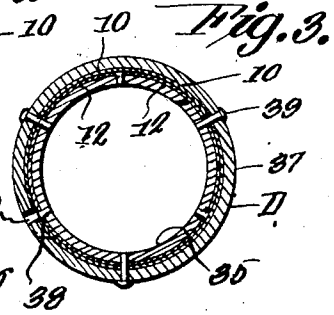


Fig. 4.

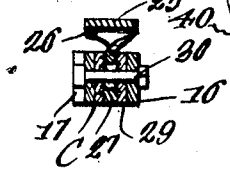


Fig. 9.

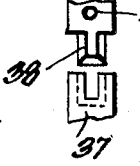


Fig. 6.

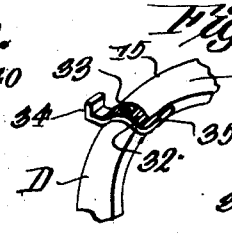
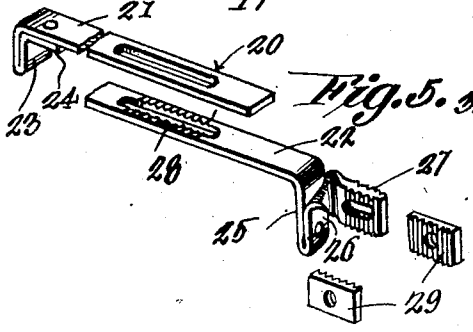


Fig. 7.



Fig. 5.



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UNITED STATES PATENT OFFICE

HORACE MONROE, OF SCIPIO, UTAH

STOVEPIPE FASTENER

Application filed February 17, 1930. Serial No. 429,196.

This invention appertains to devices for rigidly holding a stove pipe in proper position relative to a chimney flue opening, and is an improvement over my prior Patent No. 1,712,048, issued to me May 7, 1929.

One of the primary objects of my present invention is to provide novel means for uniting the split band which engages the stove pipe with the locking bar, and novel means carried by the split band for engaging the stove pipe collar or thimble.

A further object of my invention is the provision of novel means for rigidly connecting the elbow section of the stove pipe with the other sections of the stove pipe, whereby accidental displacement of the stove pipe sections relative to one another will be prevented, the said means forming a tight joint so as to prevent the escape of smoke through said joints.

A further object of my invention is to provide a stove pipe joint fastener and flue connector which will be of exceptionally simple and durable character, and which can be manufactured and placed upon the market and incorporated with a stove pipe chimney at a low cost.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described, claimed, and illustrated in the accompanying drawing, in which drawing:—

Figure 1 is a side elevation of my improved device showing the same applied to a stove pipe, the chimney wall being shown in vertical section.

Figure 2 is a transverse section through the stove pipe taken on the line 2—2 of Figure 1 looking in the direction of the arrows.

Figure 3 is a section taken on the line 3—3 of Figure 1, illustrating the novel means for connecting adjacent ends of stove pipe sections together.

Figure 4 is a detail horizontal section taken on the line 4—4 of Figure 2 looking in the direction of the arrows illustrating the means of connecting the holding bar with the stove pipe clamping ring.

Figure 5 is a detail perspective view of the sections of the holding bar and the shims which can be used in connection therewith.

Figure 6 is a fragmentary detail perspective view of the stove pipe clamping ring illustrating a modified form of the resilient tongue for engaging the stove pipe nipple or collar.

Figure 7 is a detail transverse section through said stove pipe clamping ring illustrating the modified form of stove pipe thimble or collar engaging fingers.

Figure 8 is an enlarged fragmentary section illustrating the stove pipe joint connection, and

Figure 9 is a detail view illustrating the type of joint utilized for the meeting ends of the stove joint clamping ring.

Referring to the drawing in detail, wherein similar reference characters designate corresponding parts throughout the several views, the letter A generally indicates a stove pipe and B a chimney wall or flue.

The stove pipe A includes the horizontal section 10, the vertical section 11, and the connecting elbow section 12. The rear end of the horizontal section 10 is inserted in the chimney flue opening 13 in accordance with the usual practice.

The horizontal section 10 of the stove pipe A is retained in the flue opening 13 by my novel device generally indicated by the reference character C, while the joints of the stove pipe A are rigidly connected together by my novel device D.

The usual collar or stove pipe thimble 14 is placed around the stove pipe section 10 and against the face of the chimney B.

My improved device C for holding the stove pipe rigidly in position in the flue opening 13 against accidental displacement, comprises a split band 15, which is adapted to encircle the stove pipe section 10 adjacent to the collar 14. The ends of the split band 15 are provided with depending apertured ears 16, and one of the ears can be provided with laterally extending tongues 17, for a purpose, which will be later described. It is to be noted that the split band 15 has a flat inner gripping face 18 for engaging the stove pipe section 10 and

that the outer face of the band is curved transversely, as can be clearly seen by referring to Figures 6 and 7. Set screws 19 are provided for engaging the stove pipe and extend through the band 15.

In connection with the split gripping band 15, I provide a holding or locking bar 20 which comprises an inner section 21 and an outer section 22. The inner section 21 is provided at its rear end with a depending arm 23 which is provided by bending the bar downwardly and at right angles. It is preferred to bend the arm back against itself and then forwardly as at 24 so as to rest in the flue openings. The section 22 has its forward end likewise bent downwardly at right angles to provide an arm 25 and this arm is bent back upon itself as at 26 so as to reinforce the same. The bent back portion 26 has its top end provided with a half twist or turn which is in turn provided with a serrated slotted locking arm 27. The inner ends of sections 21 and 22 are placed in overlapping relation and are adjusted relative to one another according to the length of the flue opening 13 so that the depending arms 23 and 25 thereof will snugly engage the opposite sides of the chimney wall. The overlapping sections are provided with a registering slot 28 and the sections can be secured together in their adjusted positions by the use of a suitable bolt extended through the slots.

In accordance with by invention, the ears 16 are placed at opposite sides of the serrated slotted arm 27 and an adjusting bolt 30 is passed through the apertures in the ears 16 and through the slot in the serrated arm 27, it can be seen by tightening of the bolt 30. that the clamping band 15 can be brought into intimate contact with the stove pipe section 10, and will be firmly and adjustably secured to the serrated arm 27. Thus, the holding bar is rigidly connected to the chimney wall and to the stove pipe section 10 which will prevent displacement thereof.

If preferred, suitable shims 29 can be placed between the ears 16 and the arm 27, so band 15 and stove pipe 10 can be adjusted in position with arm 27, when placed together. It is to be noted that the inner faces of the shims 20 can also be serrated so as to engage the serrated faces of the arm 27.

In accordance with my present invention, the split band 15 between the split sections thereof is provided with arcuate resilient tongues 31 arranged in spaced relation which are adapted to rest upon the collar 14 for holding the same in place against accidental movement.

It is to be noted that in Figures 1 and 2 these resilient tongues 31 are formed directly on one edge of the split band 15, but if preferred these fingers can be made separate from the band and secured thereto by suitable fastening elements.

In Figures 6 and 7 I have illustrated such a construction, and in this instance, I provide an arcuate strap 32 which extends over the outer face of the band 15 and this strap can be secured thereto in any desired way such as by a fastening screw 33. One end of the strap is provided with a substantially vertically disposed resilient ear 34, while the other end of the strap is provided with an inclined resilient ear 35′ providing resilient ears extending outwardly from the opposite sides of the band of different character. Thus, the band can be placed on the stove pipe section 10 so as to permit either one set of ears, or the other set of ears, to engage the collar 14 according to the construction or contour of the collar and the position of the band relative to the collar. The outwardly projecting ear which is not engaging the collar 14 may constitute a grip to permit the band 15 to be easily removed from the pipe when desired.

It is to be noted that the tongue 17 formed on one of the ears 16 functions to hold the holding nut or adjusting bolt 30 against rotation while the bolt is being turned for adjusting the band 15.

I provide my novel means D for connecting the desired stove pipe sections together so as to provide positive means for preventing accidental displacement of these sections relative to one another and as this means D is the same in all instances, only one of the same will be described in detail.

The means D comprises an inner annular resilient split band 35 which is connected to the inner face of the stove pipe section which extends into the other stove pipe section by means of suitable fastening elements such as screws 36. The function of this split band 35 is to provide a reinforcement of the inner stove pipe section and to give resiliency thereto. After the inner resilient band 35 has been placed in position, the stove pipe section is then inserted into the adjacent stove pipe section and an outer split band 37 is then placed over the outer stove pipe section. The adjacent ends of the outer band ring 37 are provided with tongue and groove connection 38 so that the ends of the band when arranged will be firmly united and after the outer band 37 is placed in position suitable fastening elements, such as screws 39 are passed through the band 37, the overlapping stove pipe sections and into the inner band 35. This firmly locks the bands and the stove pipe sections together and accidental displacement of the sections is precluded.

Changes in details may be made without departing from the spirit or the scope of this invention, but:—

What I claim as new is:

1. A stove pipe fastener comprising a split band having a smooth inner gripping face and apertured ears on each side of the split

portion thereof, a pair of resilient ears formed on one edge of the band on each side of the apertured ears, an adjustable locking bar having its opposite ends provided with chimney engaging ears, and a forwardly extending apertured arm provided with serrated faces, said arm lying between the apertured ears of the split band, shims having their inner faces serrated and disposed between the apertured ears and in engagement with the serrated faces of the arm, and an adjusting bolt extending through the apertured ears of the band through the shims and the serrated arm of the locking bar.

2. In a stove pipe fastener, a resilient split band for engaging a stove pipe section, a strap secured to the outer rim of the band and having its ends extending laterally from the edges of the band, said ends being bent outwardly to form resilient ears disposed at different angles to the plane of the band.

In testimony whereof I affix my signature.

HORACE MONROE.